

Washington State Modifications to the MUTCD*

*Manual on Uniform Traffic Control Devices for Streets and Highways

May 1996

M 24-01



Washington State Department of Transportation
Environmental and Engineering Service Center
Traffic Office



Persons with disabilities may request this information be prepared and supplied in alternate forms by calling the WSDOT ADA Accommodation Hotline collect (206) 389-2839. Persons with hearing impairments may access WA State Telecommunications Relay Service at TT 1-800-833-6388, Tele-Braille 1-800-833-6385, or Voice 1-800-833-6384, and ask to be connected to (360) 705-7097.

Engineering Publications

Washington State Department of Transportation
PO Box 47408
Olympia, WA 98504-7408
E-mail: engrpubs@wsdot.wa.gov

Phone: (360) 705-7430
Fax: (360) 705-6861

<http://www.wsdot.wa.gov/fasc/EngineeringPublications/>



Transmittal Number	Date
PT 98-024	April 1998
Distribution	
TO: All holders of the Washington State Modifications to the MUTCD	
Publication Title	Publication Number
Washington State Modifications to the MUTCD*	M 24-01
Originating Organization	
Field Operations Support Service Center	

Remarks and Instructions


Errata notification to the May, 1996 Washington State Modifications to the MUTCD

On page 5, under WAC 468-95-020 "Parking for the Disabled in Urban Areas," paragraphs 1 and 2 are revised to read as follows:

(1) A paragraph is added to MUTCD Section 2B-31, Urban Parking and Stopping Signs (R7 series). "A parking space or stall for a physically disabled person shall be indicated by a vertical sign with the international symbol of access, *whose colors are white on a blue background*, described under RCW 70.92.120 and the notice 'State Disabled Parking Permit Required.' "

(2) A paragraph is added to MUTCD Section 2B-32, Placement of Urban Parking Signs. "Signs indicating a parking space or stall for a physically disabled person shall be installed between *thirty-six* and *eighty-four* inches off the ground."

(Revisions show in italics.)

Distributed By	Phone Number	Signature
Publications Support Services	(360) 705-7430	
Engineering Publications	FAX 705-6861	

Foreword

Drivers become accustomed to and expect the same level and style of regulatory, warning, and informational guidance from traffic control devices wherever they travel. Therefore, uniform standards for traffic control are necessary to help maximize motorist safety.

Revised Code of Washington (RCW) 47.36, Traffic Control Devices, requires the Washington State Department of Transportation (WSDOT) to adopt uniform standards for traffic control devices installed along state highways. The law also requires that traffic control devices along county roads fully conform to these adopted standards, and those along city streets conform to the extent possible.

To fulfill this responsibility, WSDOT, through *Chapter 468-95 of the Washington Administrative Code (WAC)*, has adopted the 1988 edition of the Federal Highway Administration (FHWA), *Manual on Uniform Traffic Control Devices (MUTCD)*. Also included in *468-95 WAC* are legislative preferences that modify specific parts of the MUTCD, and items that address traffic control considerations unique to the state of Washington.

468-95 WAC is contained herein as well as errata (pen and ink) changes and revisions to the MUTCD published by the FHWA. Accordingly, these modifications are intended for use as a companion document to the MUTCD to customize it for use in Washington State. It is the manual holders responsibility to contact the FHWA to determine whether other errata or revisions, not included in this manual, are applicable. In case of a conflict, *468-95 WAC* shall rule over any errata or revision to the MUTCD.

Dave Peach, State Traffic Engineer

Contents

	Page
Changes by Washington Administrative Code (WAC)	5-11
FHWA Errata Notices	13-24
FHWA Revisions	25-26

Chapter 468-95 WAC Traffic Control Devices

WAC

468-95-010	General.
468-95-020	Parking for the disabled in urban areas.
468-95-025	Signing to regional shopping centers.
468-95-030	No passing zone markings.
468-95-035	Pavement edgelines and raised pavement markers supplementing other markers.
468-95-037	Stop line locations.
468-95-040	Meaning of signal indications.
468-95-050	Meaning of lane-use control indications.
468-95-055	MUTCD Part VI
468-95-060	When children are present.
468-95-070	Meaning of signal indications.
468-95-080	Functions.
468-95-090	County road signing.
468-95-100	Compliance dates.

WAC 468-95-010 General. The “Manual on Uniform Traffic Control Devices for Streets and Highways” (MUTCD), 1988 edition, and future revisions approved by the Federal Highway Administrator, except as modified by the Department of Transportation herein, as the national standard for all highways open to public travel, published by the U.S. Department of Transportation, Federal Highway Administration, was duly adopted by Administrative Order No. 127 of the Secretary of Transportation dated December 19, 1990. The manual includes in part many illustrations, some of which depend on color for proper interpretation. The code reviser has deemed it inexpedient to convert these regulations and illustrations to the prescribed form and style of WAC and, therefore, excludes them from publication. Copies of the MUTCD may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The document is available for public inspection at the headquarters office and all district offices of the Washington State Department of Transportation. Further, each city, town, and county engineering office in the state will have a copy of the MUTCD, with revisions, in its possession.

WAC 468-95-020 “Parking for the Disabled in Urban Areas.” Pursuant to RCW 46.61.581 the following modifications to the MUTCD are established:

(1) A paragraph is added to MUTCD Section 2B-31, Urban Parking and Stopping Signs (R7 series). “A parking space or stall for a physically disabled person shall be indicated by a vertical sign with the international symbol of access described under RCW 70.92.120 and the notice “State Disabled Parking Permit Required.”

(2) A paragraph is added to MUTCD Section 2B-32, Placement of Urban Parking Signs. “Signs indicating a parking space or stall for a physically disabled person shall be installed between forty-eight and sixty inches off the ground.”

(3) A paragraph is added to MUTCD Section 3B-16, Parking Space Markings. “A parking space or stall for a physically disabled person shall be indicated by a painted white line, at least six inches in width, on the improved surface delineating the perimeter of the parking space or stall.”

WAC 468-95-025 “Signing to Regional Shopping Centers.” Pursuant to section 1, chapter 469, Laws of 1987, a regional shopping center may be signed as a guide sign designation from state highways in accordance with the applicable sections of MUTCD Part II-D, Guide Signs — Conventional Roads, Part II-E, Guide Signs — Expressways, and Part II-F, Guide Signs — Freeways, and in accordance with subsections (1) through (8) of this section.

(1) There shall be at least five hundred thousand square feet of leasable retail floor space;

(2) There shall be at least three major department stores owned by national or regional retail chain organizations;

(3) The center shall be located within one highway mile of the state highway;

(4) The center shall generate at least nine thousand daily one-way vehicle trips to the center;

(5) Sufficient sign space shall be available for installation as specified in the MUTCD;

(6) Supplemental follow-through directional signing is required on county roads or city streets at key motorist decision points if the center is not clearly visible from the point of exit from the state highway and shall be installed by the city or county prior to installation of signs on the state highway;

(7) Signing on the state highway to a county road or city street that bears the name of the regional shopping center fulfills the statutory requirements for signing to those centers. Signing to shopping centers not having such signing shall be supplementary guide signs that are post mounted on the roadside;

(8) The costs of materials and labor for fabricating, installing, and maintaining regional shopping center signs shall be borne by the center.

WAC 468-95-030 “No Passing Zone Markings.” The first paragraph of MUTCD Section 3B-3 is amended to read as follows:

Where center lines are installed, no-passing zone markings shall be established at vertical curves on two- and three-lane highways where an engineering study indicates passing must be prohibited because of inadequate sight distances or other special conditions.

Where center lines are installed, no-passing zone markings shall be established at horizontal curves on two- and three-lane highways where an engineering study indicates passing must be prohibited because of inadequate sight distances or other special conditions except: Along highway sections of almost continuous horizontal curvatures, such as in mountainous terrain, no-passing zone markings shall not be established at horizontal curves. Such highway sections would otherwise require almost continuous no-passing zone markings which could restrict motorists from exercising judgment that it is safe to pass a slow moving vehicle and still be in compliance with Chapter 46.61 RCW.

WAC 468-95-035 Pavement Edge Lines and Raised Pavement Markers Supplementing Other Markings. Pursuant to RCW 47.36.280, the second paragraph of MUTCD Section 3B-6 is revised as follows:

Edge lines shall be used on all interstate highways, on rural multilane divided highways, on all principal arterials and minor arterials within urbanized areas, except when curb or sidewalk exists, and may be used on other classes of roads. Jurisdictions shall conform to these requirements at such time that it undertakes to renew or install permanent markings on new or existing roadways. The lines shall be white except that on the left edge of each roadway of divided streets and highways and one-way roadway in the direction of travel, they shall be yellow.

These standards shall be in effect, as provided in this section, unless the legislative authority of the local governmental body finds that special circumstances exist affecting vehicle and pedestrian safety that warrant a site-specific variance to the standard.

Pursuant to RCW 47.36.280, the second paragraph of MUTCD Section 3B-15 is revised as follows:

Raised pavement markers may also be used to supplement other markings for channelizing islands or approaches to other objects. The general use of raised pavement markers along right edge lines is strongly discouraged because they can cause steering difficulties and make bicyclists lose control of their vehicles. Raised or recessed pavement markers may be used along right edge lines on the taper in lane transition sections, on approaches to objects and within channelization at intersections. Raised or recessed pavement markers can only be used along right edge lines at other locations where an engineering study has determined the markers are essential to preserving pedestrian, bicycle, and motor vehicle safety. At the initiation of the engineering study, local bicycling organizations, the regional member of the state bicycling advisory committee, and the WSDOT bicycle and pedestrian program manager shall be notified of the study for review and comment. Positioning and spacing of the markers in such cases must be determined by engineering judgment, taking into consideration their effect on bicycle, pedestrian, and motor vehicle safety. Other applications of raised or recessed pavement markers along right edge lines of arterials are considered to be nonconforming to this section. Cities and counties shall remove nonconforming raised pavement markings at the time that they prepare to resurface roadways, or earlier at their option.

These standards shall be in effect, as provided in this section, unless the legislative authority of the local governmental body finds that special circumstances exist affecting vehicle and pedestrian safety that warrant a site-specific variance to the standard.

WAC 468-95-037 Stop Line Locations. The third paragraph of MUTCD Section 3B-17 is revised as follows:

Stop lines, where used, should ordinarily be placed four feet in advance of and parallel to the nearest crosswalk line. In the absence of a marked crosswalk, the stop line should be placed at the desired stopping point, in no case less than four feet from the nearest edge of the intersecting roadway.

WAC 468-95-040 “Meaning of Signal Indications.” Pursuant to RCW 46.61.055, the first sentence of paragraph 3, Item (c), of MUTCD Section 4B-5, is amended to read as follows:

Except when a sign is in place prohibiting a turn, vehicular traffic facing any steady red signal may cautiously enter the intersection to turn right, or to turn left from a one-way or two-way street into a one-way street, after stopping as required by (a) and (b) above.

WAC 468-95-050 “Meaning of Lane-Use Control Indications.” Pursuant to RCW 46.61.072, paragraph 2 of MUTCD Section 4E-9, is amended to read as follows:

A steady YELLOW X or a flashing RED X means that a driver should prepare to vacate, in a safe manner, the lane over which the signal is located because a lane control change is being made, and to avoid occupying that lane when a steady RED X is displayed.

WAC 468-95-055 “MUTCD Part VI.” Certain portions of the 1988 Edition of the *MUTCD, Revision 3, Part VI, Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility, and Incident Management Operations*, published September 3, 1993, by the Federal Highway Administration, are amended herein.

(1) In Section 6F-1, Signs, the seventh paragraph from the section’s beginning is revised to read as follows:

Guidelines for height and lateral clearance of temporary post-mounted roadside signs are shown in figure VI-5. Signs erected at the side of the road should be mounted at a height of at least 7 feet in urban areas and 5 feet in rural areas, measured from the bottom of the sign to the near edge of the pavement. The height to the bottom of a secondary sign mounted below another sign may be 1 foot less than the appropriate height specified above.

(2) Figure VI-5, Height and Lateral Location of Signs - Typical Installation.

The seven foot minimum mounting height in the illustration for a rural district is revised to a five foot minimum; and, the six foot minimum mounting height in the illustration for a rural district with advisory speed plate is revised to a four foot minimum.

(3) Table VI-3, Suggested Advance Warning Sign Spacing, in Subsections 6F-1 and 6H-3 is replaced by the following:

SIGN SPACING (1)		
Freeways & Expressways	55/65 MPH	1500' ± Or as per MUTCD
Rural Roads	45/55 MPH	500' ±
Rural Roads & Urban Arterials	35/40 MPH	350' ±
Rural Roads, Urban Streets, Residential & Business Districts	25/30 MPH	200' ± (2)

- (1) All spacings may be adjusted to accommodate interchange ramps, at-grade intersections, and driveways.
- (2) This spacing may be reduced in urban areas to fit roadway conditions.

(4) Subsection 6F-1 (b)(6), ROAD (STREET) WORK Sign (W20-1), is revised to read as follows:

The ROAD (STREET) WORK sign should be located ahead of the work space or detour, to serve as a general warning of obstructions or restrictions. It carries the legend ROAD (STREET) WORK (1,500) FT or ROAD (STREET) WORK (1/2) MILE. It may be used in conjunction with appropriate distance legends, or with other warning signs. The word CONSTRUCTION may be used in lieu of the word WORK in the sign message, prior to July 1, 1996 for construction projects or prior to July 1, 1998 for maintenance activities.

(5) Subsection 6F-6(b), Interim Markings, is revised to read as follows:

Interim pavement markings are those that may be used until it is practical and possible to install pavement markings that meet the full MUTCD standards for pavement markings. Normally, it should not be necessary to leave interim pavement markings in place for more than 2 weeks, except on roadways being paved with bituminous surface treatment (BST) and having traffic volumes under 2,000 ADT. All interim pavement markings, including pavement markings for no-passing zones, shall conform to the requirements of sections 3A and 3B with the following exceptions:

- (1) All interim broken-line pavement markings shall use the same cycle length as permanent markings and be at least 4 feet long, except that half-cycle lengths with a minimum of 2 foot stripes may be used for roadways with severe curvature (See Section 3A-6). This applies to white lane lines for traffic moving in the same direction and yellow center lines for two-lane roadways when it is safe to pass.

(2) For those interim situations of 14 calendar days or less for a two- or three-lane road, no-passing zones may be identified by using signs rather than pavement markings (See sections 3B-4, 3B-5, and 3B-6). Also, signs may be used in lieu of pavement markings on low-volume roads for longer periods, when this practice is in keeping with the state's or highway agency's policy. These signs should be placed in accordance with sections 2B-21, 2B-22, and 2C-38.

(3) The interim use of edgelines, channelizing lines, lane reduction transitions, gore markings and other longitudinal markings, and the various non-longitudinal markings (stop line, railroad crossings, crosswalks, words, symbols, etc.) should be in keeping with the state's or highway agency's policy.

(6) Subsections (1) through (5) shall become effective on January 10, 1996.

[Statutory Authority: Chapter 34.05 RCW and RCW 47.36.030. 95-23-097 (Order 154), § 468-95-055, filed 11/21/95, effective 1/10/96.]

WAC 468-95-060 "When Children are Present." The following supplemental paragraph is hereby added to Section 7B-12, "School Speed Limit Signs (S4-1, S4-2, S4-3, S4-4)," of the MUTCD:

The supplemental or lower panel of a "SCHOOL SPEED LIMIT 20" sign which reads "WHEN CHILDREN ARE PRESENT" shall indicate to the motorist that the 20 miles per hour school speed limit is in force under the following conditions:

(1) School children are occupying or walking within the marked crosswalk.

(2) School children are waiting on the curb or on the shoulder of the roadway and are about to cross the roadway by way of the marked crosswalk.

(3) School children are present or walking along the roadway, either on the adjacent sidewalk or, in the absence of sidewalks, on the shoulder within the posted school speed limit zone which extends 300 feet in either direction from the marked crosswalk.

WAC 468-95-070 "Meaning of Signal Indications." Pursuant to RCW 46.61.055, the first sentence of paragraph 3, applicable only to CIRCULAR RED OR RED arrow, of MUTCD Section 7D-5, is amended to read as follows:

Except when a sign is in place prohibiting a turn, vehicular traffic facing any steady red signal may cautiously enter the intersection to turn right, or to turn left from a one-way or two-way street into a one-way street, after stopping as required by (1) and (2) above.

WAC 468-95-080 "Functions." Pursuant to RCW 47.36.050 and 47.36.080, paragraph 2 of MUTCD Section 8A-1, is amended to read as follows:

With due regard for safety and for the integrity of operations by highway and railroad users, the highway agency and the railroad company are entitled to jointly occupy the right of way in the conduct of their assigned duties. This requires joint responsibilities in the traffic control function between the public agency and the railroad.

WAC 468-95-090 “County Road Signing.” Pursuant to RCW 36.75.300, there is added to the MUTCD, the following regulation pertaining to signing of county roads:

The legislative authority of each county may, by resolution, classify and designate portions of the county roads as primitive roads where the designated road portion:

(1) Is not classified as part of the county primary road system, as provided for in RCW 36.86.070;

(2) Has a gravel or earth driving surface; and

(3) Has an average annual daily traffic of one hundred or fewer vehicles.

Any road designated as a primitive road shall be marked with a “PRIMITIVE ROAD” sign at all places where the primitive road portion begins or connects with a highway other than a primitive road.

A sign with the caption “CAUTION — NO WARNING SIGNS” may be installed on the same post with the “PRIMITIVE ROAD” sign, and may be individually erected at intermediate points along the road section if conditions warrant. In addition, a sign with the caption “NEXT MILES” may be installed on the same post below the “CAUTION — NO WARNING SIGNS” sign.

The designs of the “PRIMITIVE ROAD, CAUTION — NO WARNING SIGNS, and “NEXT MILES” signs are available for public inspection at the headquarters office and all district offices of the Washington State Department of Transportation.

WAC 468-95-100 Compliance dates. Through rulings approved by the Federal Highway Administrator, the 1988 edition of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) contains compliance dates to specific sections for application of certain traffic control devices. These compliance dates are hereby amended as follows:

Ruling #	MUTCD Section	Compliance Date
IV-59	4D-2, 4D-7, 7D-5, 7D-9	12/31/95
II-5	2D-48, 2H-1 Thru 2H-16	9/30/97
II-110	2I-1 Thru 2I-7	9/30/95
III-38	3B-5	9/30/95
IV-58	2B-37, 4B-5(4)(c), 4B-6-2	9/30/2001
	4B-6(5)(b), 4B-6(8), 4B-12, 4B-18	
II-122	2D-15, 2E-11, 2F-11	9/30/97
IV-73	4B-6-5(a), 4B-15	9/30/96
II-119	2B-44	11/30/97

[Statutory Authority: Chapter 34.05 RCW and RCW 47.36.030. 95-23-097 (Order 154), § 468-95-100, filed 11/21/95, effective 1/10/96; 95-11-022 (Order 151), § 468-95-100, filed 5/8/95, effective 6/8/95; 91-02-008 (Order 127), § 468-95-100, filed 12/21/90, effective 1/21/91.]

FHWA Errata Notifications to the 1988 edition of the MUTCD.

The following pen and ink changes were sent out by the FHWA on November 2, 1989.

1. **Page 2B-11. Section 2B-17,** first paragraph, the first sentence should read, "The standard size of Lane Use Control signs shall be 30 x 36 inches when mounted overhead, and 30 x 30 inches when post mounted."
2. **Page 2B-18.** In the third line from the top of the page, change 20 inches to 30 inches.
3. **Page 3B-5. Figure 3-4b,** the pavement markings shown on the right of the turn-only lanes should be white.
4. **Page 3B-6. Figure 3-5a,** add an asterisk between the first and second and the third and fourth turn arrows in the two-way left turn lane.
5. **Page 3B-8. Section 3B-5,** add the following speeds and distances to the table shown:

85 Percentile Speed (MPH)	Minimum Passing Sight Distance (Feet)
25	450
35	550
45	700
55	900
65	1100

6. **Page 3B-19. Figure 3-13a,** the first and last "L" should read "2L."
7. **Page 3B-20. Section 3B-12,** third paragraph, third sentence should read, "A two-way left

turn lane shall be marked by a single direction, no-passing marking on each edge of the lane. Pavement marking arrows may be used as shown in figure 3-5a."

8. **Page 3B-30. Figure 3-19**, add asterisks to indicate optional use for the following: the thru/right turn and the thru arrow markings on the upper leg of the intersection, the thru/right turn arrow marking in the far-right lane of the lower leg of the intersection, the thru/left turn arrow marking on the left leg of the intersection, and the left-turn radii from the bottom of the intersection. Delete the left-turn radii from the top of the intersection.
9. **Page 3D-3. Section 3D-5**, first paragraph, first line, replace the word "shall" with the word "should." In the same paragraph, the second sentence should read, "They should be placed not less than 2 or more than 8 feet outside the outer edge of the ..."
10. **Page 3F-1. Section 3F-2**, fourth paragraph, fourth line should read, "minimum 6-inch white band placed..."
11. **Page 6B-4. Figure 6-2**, obsolete, see MUTCD Revision 3 - New Part VI.
12. **Page 6B-10. Figure 6-8**, obsolete, see MUTCD Revision 3 - New Part VI.
13. **Page 9C-4. Figure 9-6**, first diagram in upper left-hand corner, change "not less than 250'" to "not less than 50'."

The following pen and ink changes were sent out by the FHWA on May 12, 1992.

1. **Throughout the MUTCD**, change references to HTO-20 to HHS-30.
2. **Table of Contents.** Change all references for "Legal Authority" to "Placement Authority." Placement Authority is consistent with MUTCD section 1A-3.1.
3. **Page 1A-1, Section 1A-1, Purpose of Traffic Control Devices.** First paragraph, last sentence, change "iniformed" to "uniform."
4. **Page 1A-3, Section 1A-3, Responsibility for Traffic Control Devices.** Second paragraph, third line of quoted text should read, "...highways within this State."
5. **Page 1A-8, Section 1A-8, Color Code.** Add "Evacuation Route" to Color Code for BLUE.
6. **Page 2A-8, Section 2A-21, Standardization of Location.** Modify last paragraph to read, "Typical placement for a number of signs is illustrated in Figures 2-1 to 2-4."
7. **Page 2A-10, Section 2A-24, Lateral Clearance.** Second paragraph, 3rd line, after the word "areas" add "or at intersections with large radii in rural areas,".
8. **Page 2A-16, Figure 2-2a.** In the upper and lower left-hand corner, change the word "major to "minor" for the southbound and eastbound lanes.
9. **Page 2A-17, Figure 2-3.** The two NO LEFT TURN signs are improperly located. Reverse the location of both signs so that they are placed

on the opposite sides of the vertical streets. Also, add a note that turn prohibition signs are optional (see page 2A-13).

10. **Page 2A-18, Figure 2-3a.** Although this figure appears to be one drawing, it is actually two drawings; one depicting alternate one-way signing for medians less than 30 ft. and one depicting alternate one-way signing for medians greater than 30 ft. The bottom diagram should be labeled, "MEDIAN GREATER THAN 30'." Also in the bottom diagram, the optional turn-prohibition sign should show a red circle and slash and the first set of edgelines should be white.
11. **Page 2A-19, Figure 2-4.** Add a note that this figure is not scaled to show standard spacing for pavement markings. See Figure 3-19 and section 3B-20 for proper spacing.
12. **Page 2A-20, Figure 2-5.** Reposition the railroad crossing pavement marking so that it is adjacent to the railroad crossing warning sign. Also include marginal notation for the official ruling (VIII-12, Rev. 5).
13. **Page 2B-19, Section 2B-26 and 2B-27.** The last line of the last paragraph, change reference to Section from 2E-41 to 2E-40.
14. **Page 2B-22, Section 2B-29,** second paragraph. The reference should be changed from page 2A-11 to 2A-17.
15. **Page 2C-2a,** last paragraph of **Section 2C-3,** change page 2A-17 to page 2A-20.
16. **Page 2C-17, Section 2C-32,** third paragraph. The reference should be changed to Section 3B-18.

17. **Page 2D-8, Section 2D-15.** In the last sentence of this section, change the word "should" to "shall" in the discussion concerning the first letter of cardinal directions on guide signs. The required enlargement of the first letter of each cardinal direction word has a compliance date of December 31, 1994.
18. **Page 2D-21, second paragraph, item 2.** Correct the spelling of "where."
19. **Page 2d-26,** the D5-5a sign has been revised to show only the Picnic Table.
20. **Page 2I-4, Figure 2-53.** Change the caption for the Intersection and Advance Signs to read, "Maximum length of business name per line is 54" instead of 5'4".
21. **Page 3B-6, Figure 3B-5a.** The solid line on the right edge of the two-way left-turn lane at the top of the page should be yellow.
- 22.* **Page 3B-12, Figure 3-9.** In Figure (a), change the yellow broken lines to yellow double solid lines on both the east and west side of the intersection. In Figure (b), label the eastbound to northbound and the northbound to eastbound turn lanes "Mandatory Turn Lane," and replace the single asterisk preceding the word ONLY in the mandatory turn lane with a triple asterisk. To the key shown in the lower right corner of Figure 3-9, add a line to read: `*** "ONLY" required if turn arrow markers are installed in mandatory turn lanes." For Figure (c), in the eastbound to northbound, the westbound to northbound, and the westbound to southbound turn lanes, add an asterisk by each turn arrow pavement marker in each turn bay indicating optional turn arrow pavement markers. Also in Figure (c), add the pavement marking "ONLY" in the westbound to southbound

left turn bay. In Figure (c), label the northbound to eastbound turn lane "Mandatory Turn Lane," and delete the single asterisk preceding the turn arrow pavement marker. Section 3B-20 states that lane-use arrow markings in mandatory turn situations must be accompanied by the word marking "ONLY." "ONLY" may be used (with arrows) in left and/or right turn bays.

* As updated by FHWA August 05, 1992.

23. **Page 3B-14, Section 3-11.** In the first sentence of paragraph 4, change "special marking pattern" to "lane drop marking pattern."
24. **Page 3B-16, Figure 3-11a, top view.** The yellow edge line should be on the left ramp edge line rather than on the main roadway right edge line as shown. Additionally, the figure number should be changed from "Figure 3-11a" to "Figure 3-11c" since the Figure 3-11 on page 3B-15 has an "a" and "b".
25. **Page 3B-17, Figure 3-12.** In the caption, change the word "dashed" to "broken."
26. **Page 3B-24, Figure 3-14.** The reference to Section 3B-15 on Figure 3-14b should read "Section 3B-18."
27. **Page 6B-4, Figure 6-2.** Obsolete, see MUTCD Revision 3 - New Part VI.
28. **Page 6B-9, Figure 6-7.** Obsolete, see MUTCD Revision 3 - New Part VI.
29. **Page 6C-1, Section 6C-1.** Obsolete, see MUTCD Revision 3 - New Part VI.
30. **List of Official Rulings.** Change compliance date for Request IV-58(C) to 12/31/97.

**Errata No. 1 for Part VI
November 1994**

The following list of editorial changes are issued to help improve the readability of Part VI, provide text clarification and consistency and correct grammatical, typographical and pictorial errors which can be made simply by pen and ink changes:

1. On page 8, section 6C-2.a Advance Warning Area (1) Urban, delete the second sentence as follows:
Warning sign spacings in advance of the transition area normally range from four to eight times the speed (mph) in feet, with the high end of the range being used when speeds are relatively high. ~~When single advance warning signs are used (as in the case of low speed residential streets), the advance warning area can be as short as 200 feet.~~
This needs to be done because if using any speed under 50 mph, a distance smaller than 200 feet is obtained. For example, at 30mph the minimum spacing of four times the speed would be 120 feet.
2. On page 25, section 6D-2 WORKER SAFETY CONSIDERATIONS, revise the fifth bullet as follows:
Public Information-Improved driver performance may be realized through a well-prepared and complete public relations efforts that covers the nature of the work, the time and duration of its execution, and its anticipated effects ~~upon~~ on traffic, and possible alternate routes and modes of travel. Such programs have been found to result in a significant drop in traffic; that reduces the possible number of conflicts and may allow a temporary lane closing for additional buffer area space.
3. On page 27, section 6E-4 HAND-SIGNALING DEVICES, revise the third and seventh sentence in the first paragraph to read respectively:
The standard STOP/SLOW sign paddle shall be 18 inches wide and octagonal in shape ~~square~~ with letters at least 6 inches high.
To improve conspicuity, the STOP/SLOW paddles may be ~~supplemented~~ modified to incorporate on the STOP face, by one or two symmetrically positioned alternately flashing white high intensity lamps on each side light(s) on either the side of, or above and below the STOP legend. The light(s) may be activated by a demand switch or on/off switch.
4. On page 29, in figure VI-4 the flagger with the flag that is depicting "To Alert and Slow Traffic" should not be moving her free hand in an up and down motion. The free hand should be at her side fully extended down. This will agree with the methods of flagger hand signaling on page 28.

5. On page 31 move the second paragraph -- "Where the color orange is specified, fluorescent red-orange ..." to become the second paragraph under **6F. TYPES OF DEVICES**.
6. On page 62 in figure VI-9 Operating Mode III. add an additional arrow display under the Panel Display column that shows four or more lights in a horizontal direction for the Flashing Caution mode.
7. On page 66, section 6F-5 d. (1) Vertical Panels, revise the third sentence in the first paragraph to read:

Panel stripe widths shall be 6 inches, except where panel heights are less than 36 inches, ~~when~~ then 4-inch stripes may be used.
8. On page 67, section 6F-5 f. Barricades (1) Design, revise the second sentence in the third paragraph to read:

The stripes shall be 6-inches wide, except where rail lengths are less than 36 inches, ~~when~~ then 4-inch-wide stripes may be used.
9. On page 70, Figure VI-10 Channelizing Devices, the 18-inch Tubular Marker does not need the Retroreflective Band since 18-inch Tubular Markers can not be used at night.
10. On page 71, section 6F-6 a. MARKINGS, revise number (3) to read:

(3) Markings shall be placed, along the entire length of any surfaced detour or temporary roadway, before such detour or roadway is open to traffic.
11. On page 75, section 6F-7d change the third sentence in the first paragraph to read:

However, if lights are needed to delineate the traveled way through and around obstructions in a temporary traffic control zone, the delineation shall be accomplished by steady-burning lamps.
This change will not make warning lights mandatory.
12. On page 78, section 6F-8 (2), add the following sentence to the last paragraph :

For stationary operations, the truck's parking brake should be set and, when possible, the front wheels turned away from the work site. Turning the front wheels should be based on specific conditions at the site such that the after-impact trajectory is into a safe area.
13. On page 78, section 6F-8.b, the third paragraph should be modified to read as follows:

On each side of the roadway only the first two yellow warning lights at the start of a continuous barrier should

- be Type B A flashing.
14. On page 87, section 6G-4. a, change the last sentence to read:

Flashing arrow displays ~~should~~ shall be used only in the caution mode.
This agrees with section 6F-3. b first paragraph on page 61.
 15. On page 107, Figure VI-11, Symbols used in typical application diagrams, make the following corrections:

Portable ~~concrete~~ barrier
Portable ~~concrete~~ barrier with warning lights
Place an orange stripe on the Type III Barricade symbol.
 16. On page 111, Figure TA-2 surveyor symbols (as defined on page 107) should not be used to outline a blasting area.
 17. On page 115 in figure TA-4 add an additional arrow display under the Panel Display column that shows four or more lights in a horizontal direction for flashing Caution mode.
 18. On page 123, Figure TA-8 the white center line pavement marking at the top of the figure should be yellow.
 19. Figure TA-11 on page 129 and TA-13 on page 133 depicts a distance of 2S before and after the work space. This distance is to be replaced with the word "Buffer Space" per section 6C-2 c. (3) Buffer Space on page 9.
 20. On page 132 revise number 5 to read:
A portable changeable message sign may be used in place addition to the initial warning sign per section 6F-2 b application.
 21. On page 135, figure TA-14 The word "optional" should be place below the warning light on top of the Road Work Ahead sign.
 22. On page 140, make the following change to item #4 and #5:
 4. A truck-mounted attenuator (TMA) ~~shall~~ should be used on the protection vehicle and ~~should~~ may be ~~considered~~ used on the work vehicle.
 5. The work vehicle shall be equipped with beacons, and the protection vehicles shall be equipped with ~~a TMA~~ and two high-intensity flashing lights mounted on the rear, adjacent to the sign. Protection and work vehicles should display flashing or rotating beacons both forward and to the rear.
 23. On page 140, delete item 7 in its entirety because arrow

displays are not to be used on two-lane roadways.

~~7. Arrow displays are optional and should be Type B, 60 inches by 30 inches.~~

24. On page 145, Figure TA-19, the ONE-WAY arrow sign R6-1 under the DETOUR sign M4-10 should be black on white. The ONE-WAY arrow sign is a regulatory sign.
25. On page 149, Figure TA-21, the channelizing devices form a right taper, the devices should form a left taper to agree with item number 2 on page 148.
26. On page 151, Figure TA-22, the pavement marking are in error; the broken yellow lines going from the bottom to the top of the page should be broken white lines.
27. On page 151, Figure TA-22, the channelizing island formed by the three devices (small orange squares) should be moved up just above the crosswalk closer to the intersection.
28. On page 157, Figure TA-25, add the flag tree symbol above the 1/2L.
29. On page 169, Figure TA-31, the word "optional" under Buffer Space should be deleted to agree with item number 3 on page 168.
30. The word "optional" should be placed below the arrow displays on several pages. This agrees with the first sentence in section 6F-3.b. Listed below are the pages with the respective figure numbers:
 - On page 169, Figure TA-31; On page 171, Figure TA-32;
 - On page 175, Figure TA-34; On page 181, Figure TA-37;
 - On page 183, Figure TA-38; On page 185, Figure TA-39;
 - On page 191, Figure TA-42; On page 195, Figure TA-44;
31. On page 173, Figure TA-33 the typical diagram on the right hand side needs to be clarified. The word "optional" is for the Truck Mounted attenuator and Arrow Display.
32. On page 195, Figure TA-44 - The diagram on the right-side of the page, "ROAD WORK AHEAD" sign should be orange.
33. The stripes on Type III barricades on some typical application diagrams have been inadvertently shown in the wrong direction. The direction of the stripes should conform the section 6F-5f(1) Barricades, page 68, which states:

Where a barricade extends entirely across the roadway, the stripes should slope downward in the direction toward which traffic must turn. Where both right and left turns are provided, the stripes may slope downward in both directions from the center of the barricade or barricades. Where no turn is intended, the stripes should slope downward toward the center of the barricade or barricades.

34. The following are new signs with appropriate numbers to be added in MUTCD Section 6F.

UTILITY WORK AHEAD



W21-7

THRU TRAFFIC MERGE



W4-1a

SLOW TRAFFIC AHEAD



W23-1

RIGHT TWO LANES CLOSED 1/2 MILE



W20-5a

DETOUR SIGN (with Arrow)
STREET NAME Optional



M4-9R

EXIT OPEN



E5-2

CENTER LANE CLOSED AHEAD



W9-3

STAY IN LANE



R4-9

RAMP NARROWS



W5-4

ON RAMP



W13-4

PEDESTRIAN CROSSWALK



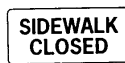
R5-7

SHOULDER WORK



W21-5

SIDEWALK CLOSED



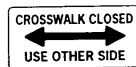
R5-8

RIGHT SHOULDER CLOSED

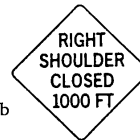


W21-5a

CROSSWALK CLOSED USE OTHER SIDE RIGHT SHOULDER CLOSED 1000FT



R5-9



W21-5b

SIDEWALK CLOSED AHEAD CROSS HERE



R5-9a

1988 MUTCD REVISION 1
January 17, 1990

Obsolete, see MUTCD Revision 3 – New Part VI.

1988 MUTCD REVISION 2
March 17, 1992

TEXT CHANGES TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES DISCUSSED IN FINAL RULE DOCKET NO. 92.11.

Request VIII-32(C) Stop or Yield Signs at Highway-Rail Grade Crossings.

Delete Section 8B-9 (page 8B7) in its entirety and replace with the following:

8B-9 STOP or YIELD Signs at Grade Crossings (R1-1, W3-1, R1-2, W5-2)

STOP or YIELD signs may be used at highway-rail grade crossings, at the discretion of the responsible State or local jurisdiction, for crossings that have two or more trains per day and are without automatic traffic control devices.

For other crossings with passive protection, STOP or YIELD signs may be used after need is established by a traffic engineering study. The study should take into consideration such factors as: volume and character of highway and train traffic, adequacy of stopping sight distance, crossing accident history, and need for active control devices.

For all highway-rail grade crossings where STOP or YIELD signs are installed, the placement shall conform to the requirements of MUTCD Section 2B-9 Location of Stop Sign and Yield Sign. STOP AHEAD or YIELD AHEAD Advance Warning signs shall also be installed.

1988 MUTCD REVISION 3
September 3, 1993

Total revision of Part VI “Traffic Controls for Street and Highway Construction, Maintenance, Utility, and Engineering Operations is available from Government Printing Office, Superintendent of Documents, Washington, D.C. 20402, (202) 783-3238.

See amendments to Part VI of the MUTCD as adopted by WAC 468-95-055 herein.

1988 MUTCD REVISION 4
November 1, 1994

TEXT CHANGE TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES DISCUSSED IN INTERIM FINAL RULE DOCKET NO. 94-33

Request VI-82 (C) Quartz Timed Traffic Signal

On page 76, Section 6f-8c. Temporary Traffic Signals, revise the last paragraph to read as follows:

One-way traffic flow requires an all-red interval of sufficient duration for traffic to clear the portion of the temporary control zone controlled by traffic signals. Safeguards shall be incorporated to avoid the display of conflicting signals at each end of the temporary traffic control zone.

1:P:MUTCD



Persons with disabilities may request this information
be prepared and supplied in alternate forms by
calling collect 360-664-9009;
deaf and hearing impaired people call
1-800-833-6388 (TTY relay service).

Washington State Department of Transportation
Engineering Publications
Transportation Building
Olympia, WA 98504
(360) 705-7430